

CLAIMS

I claim:

1       1. An illuminated retractable leash, comprising:  
2           a housing having a grip portion;  
3           a spring-based spool rotatably supported in said housing;  
4           an extendible roll of electroluminescent wire wound around  
5   the spool, the wire having a free end adapted for attachment to  
6   a pet collar; and  
7           a DC to AC power inverter, the electric output thereof  
8   selectively connected to one end of the electroluminescent wire.

1       2. The illuminated retractable leash according to claim  
2   1, further comprising a DC input jack.

1       3. The illuminated retractable leash according to claim  
2   1, further comprising a stop mechanism for engaging said spool  
3   and for blocking the extension or winding up of said  
4   electroluminescent wire about said spool.

1       4. The illuminated retractable leash according to claim  
2       1, further comprising a printed circuit board disposed in said  
3       housing, said DC to AC power inverter mounted thereon.

1       5. The illuminated retractable leash according to claim  
2       4, wherein said printed circuit board is centrally mounted to a  
3       lateral surface of said spool, whereby said printed circuit  
4       board rotates in conjunction with said spool.

1       6. The illuminated retractable leash according to claim  
2       1, further comprising a battery holder capable of holding at  
3       least one battery, said battery holder having electrical leads  
4       selectively connected to said inverter.

1       7. The illuminated retractable leash according to claim  
2       6, wherein said battery holder is disposed on said printed  
3       circuit board.

1       8. The illuminated retractable leash according to claim  
2       1, wherein said spool is transparent and at least part of said  
3       housing is transparent.

1       9. The illuminated retractable leash according to claim  
2       1, further comprising a switch electrically connected to said  
3       inverter operative to apply power to said electroluminescent  
4       wire.

1       10. An illuminated retractable leash comprising;  
2       a housing;  
3       a spring-biased spool rotatably supported in said housing;  
4       an extendible roll of electroluminescent wire wound around  
5       said spool, the wire having a free end adapted for attachment to  
6       a pet collar;  
7       a stop mechanism for engaging said spool and for blocking  
8       the extension or winding up of the electroluminescent wire about  
9       said spool;  
10       a printed circuit board centrally mounted to a lateral  
11       surface of said spool, whereby said printed circuit board  
12       rotates in conjunction with said spool; and  
13       a DC to AC inverter, the electric output thereof  
14       selectively connected to an end of the electro-luminescent wire.

1       11. The illuminated retractable leash according to claim  
2       10, further comprising a battery holder mounted to said printed  
3       circuit board, said battery holder having electrical leads  
4       selectively supplying power to said inverter.

1       12. The illuminated retractable leash according to claim  
2       10, wherein said spool and at least part of said housing is  
3       transparent.

1       13. An illuminated retractable leash comprising;  
2            a housing having a grip portion;  
3            a spring-biased spool rotatably supported in said housing,  
4    said spool having a pair of electrically conducting surfaces  
5    concentrically disposed on a lateral surface of said spool;  
6            an extendible roll of electroluminescent wire wound around  
7    said spool, said electroluminescent wire having at least two  
8    conductors, said conductors electrically connected to said pair  
9    of concentrically disposed conducting surfaces, said wire  
10    further having a free end adapted for attachment to a pet  
11    collar;  
12            a retractor mechanism whereby slack section of said wire  
13    can be taken up automatically by said spring-based spool when  
14    the maximum extension length of said wire is not being used;  
15            a pair of electric contacts mounted to said housing and  
16    positioned to make continuous electric contact with said pair of  
17    concentrically disposed conducting surfaces as the spool  
18    rotates;  
19            a printed circuit board disposed in said housing, said  
20    printed circuit board having a DC to AC power inverter, the

21 electric output thereof connected to said pair of housing  
22 mounted electric contacts; and

23 a battery holder disposed in said housing, said battery  
24 holder having electrical leads selectively supplying power to  
25 said inverter.

1 14. The illuminated retractable leash according to claim  
2 13, wherein said spool is transparent and at least part of said  
3 housing is transparent.